

Abstract

Title of the work: Comparison of energy expenditure, pulse rate and subjective perception of during road march with attached weight and without attached weight in winter conditions.

The work tries to focus on comparing of physiological parameters during military road March. The aim of this bachelor work is to compare and to find out more about physiological strain of research group of soldiers during road March with or without loading. The group of 10 soldiers is made by the students of military department of faculty of sports and education Charles University from Prague. This research group was tested during the three periods. In the first period the group was tested during 10 km walking March without loading. In the second period the group was tested with the loading of 15 kg and in the third period with the loading of 25 kg. The aim of the work is to compare the outlay of energy, cardial rate and the subjective feeling of the strain during walking tours with or without loading.

To find out the pulse rate I used as a tool the sport testers and to find out the subjective feeling of the strain I decided to use the adjusted Borg scale. The outlay of energy was calculated from the entrance data of the tested people and from the measuring pulse rate.

The results: From the recorded data we can find out some differences in subjective feeling of the loading in everyone from the group. Only two people during the first and second period of the road march were able to feel the subjective loading with the adequate regard to the actual physical condition. Further it was find out subjective maximization actual pulse frequencies compared to real pulse frequencies at road March with loading.

Key words: pulse rate, road march, subjective perception, expenditure energy